

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
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MÅRTEN ARMGARTH et al ) Group Art Unit: (unassigned)  
 )  
Application No.: (unassigned) ) Examiner: (unassigned)  
 )  
Filed: March 7, 2002 )  
 )  
For: ELECTROCHEMICAL DEVICE )

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please amend the above-identified Application, filed concurrently herewith, as indicated.

**IN THE SPECIFICATION:**

Page 1, before line 1, insert:

--Priority is claimed under 35 U.S.C. §119(a) for the filing of Swedish Application No. 0100748-3 on March 7, 2001, and under 35 U.S.C. §119(e) for the filing of U.S. Provisional Application No. 60/276,218 on March 16, 2001.--

**IN THE CLAIMS:**

Kindly replace Claims 4, 6 to 8, 10, 14, 16, 18 to 20, and 25 to 26.

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4. (Amended) An electrochemical transistor device according to claim 1, in which at least one of said source and drain contacts and gate electrode(s) is formed from the same material as the electrochemically active element.

6. (Amended) An electrochemical transistor device according to claim 4, in which the source and drain contacts and the electrochemically active element are formed from a continuous piece of said material comprising an organic material.

7. (Amended) An electrochemical transistor device according to claim 1, in which said transistor channel retains its redox state upon removal of the gate voltage.

8. (Amended) An electrochemical transistor device according to claim 1, in which said transistor channel spontaneously returns to its initial redox state upon removal of the gate voltage.

10. (Amended) An electrochemical transistor device according to claim 1, in which said organic material is a polymer.

14. (Amended) An electrochemical transistor device according to claim 1, in which said organic material further comprises a polyanion compound.

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16. (Amended) An electrochemical transistor device according to claim 1, in which said solidified electrolyte comprises a binder.

18. (Amended) An electrochemical transistor device according to claim 1, in which said solidified electrolyte comprises an ionic salt.

19. (Amended) An electrochemical transistor device according to claim 1, which is self-supporting.

20. (Amended) An electrochemical transistor device according to claim 1, which is arranged on a support.

25. (Amended) A process according to claim 22, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.

26. (Amended) A process according to claim 22, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.

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Please cancel Claim 30 without prejudice or disclaimer.

Please add the following new Claims 31 to 35.

31. (New) An electrochemical transistor device according to claim 5, in which the source and drain contacts and the electrochemically active element are formed from a continuous piece of said material comprising an organic material.

32. (New) A process according to claim 23, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.

33. (New) A process according to claim 24, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.

34. (New) A process according to claim 23, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.

35. (New) A process according to claim 24, comprising patterning of any one of said contacts, electrode(s) and electrochemically active element using a subtractive method.

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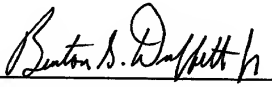
**REMARKS**

The present Amendment provides express reference to priority Applications in the Specification, and modifies the claim format only so as to eliminate the use of multiple dependency.

The examination and allowance of the Application are respectfully requested.

Respectfully submitted,

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**Attachment to Preliminary Amendment dated March 6, 2002**

**Marked-up Claims 4, 6 to 8, 10, 14, 16, 18 to 20, and 25 to 26**

4. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which at least one of said source and drain contacts and gate electrode(s) is formed from the same material as the electrochemically active element.

6. (Amended) An electrochemical transistor device according to [any one of claims 4-5] claim 4, in which the source and drain contacts and the electrochemically active element are formed from a continuous piece of said material comprising an organic material.

7. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which said transistor channel retains its redox state upon removal of the gate voltage.

8. (Amended) An electrochemical transistor device according to [any one of claims 1-6] claim 1, in which said transistor channel spontaneously returns to its initial redox state upon removal of the gate voltage.

10. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which said organic material is a polymer.

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**Attachment to Preliminary Amendment dated March 6, 2002**

**Marked-up Claims 4, 6 to 8, 10, 14, 16, 18 to 20, and 25 to 26**

14. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which said organic material further comprises a polyanion compound.

16. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which said solidified electrolyte comprises a binder.

18. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, in which said solidified electrolyte comprises an ionic salt.

19. (Amended) An electrochemical transistor device according to [any one of the preceding claims] claim 1, which is self-supporting.

20. (Amended) An electrochemical transistor device according to [any one of claims 1-18] claim 1, which is arranged on a support.

25. (Amended) A process according to [any one of claims 22-24] claim 22, in which device said organic material comprises a polymer, which process comprises deposition of said polymer on a support through *in situ* polymerisation.

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**Attachment to Preliminary Amendment dated March 7, 2002**

**Marked-up Claims 4, 6 to 8, 10, 14, 16, 18 to 20, and 25 to 26**

26. (Amended) A process according to [any one of claims 22-25] claim 22,  
comprising patterning of any one of said contacts, electrode(s) and electrochemically active  
element using a subtractive method.

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